

Amended Claims

Claims 1-84. **(Canceled).**

85. **(Currently amended)** A method for administration of a substance to a mammal,
wherein:

the method **comprises** ~~comprising~~ injecting the substance into the dermis of the
mammal by bolus administration, ~~wherein~~

improved systemic absorption is produced relative to absorption **that would be**
produced upon injecting the substance subcutaneously by bolus administration, and ~~wherein~~
the substance is a low molecular weight heparin or a dopamine receptor agonist.

Claim 86. **(Canceled).**

87. **(Previously presented)** The method of claim 85 wherein the substance is a low
molecular weight heparin.

88. **(Previously presented)** The method of claim 85 wherein the substance is a
dopamine receptor agonist.

89. **(Previously presented)** The method of claim 85 wherein the substance is in the
form of nanoparticles.

90. **(Previously presented)** The method of claim 85 wherein the injecting is through
at least one hollow needle, by electroporation, or by thermal poration.

91. **(Previously presented)** The method of claim 90 wherein the injecting is through
at least one hollow needle.

92. **(Previously presented)** The method of claim 91 wherein the at least one hollow needle comprises an array of microneedles.

Claim 93. **(Canceled)**.

94. **(Previously presented)** The method of claim 85 wherein the substance is administered by repeated bolus injections.

95. **(Currently amended)** A method for administration of a substance to a mammal, wherein:

the method comprises comprising selectively injecting the substance into the dermis of the mammal by bolus administration to obtain systemic absorption of the substance from the dermis, ~~wherein~~

improved systemic absorption is produced relative to absorption that would be produced upon injecting the substance subcutaneously by bolus administration, and ~~wherein~~ the substance is a low molecular weight heparin or a dopamine receptor agonist.

96. **(Previously presented)** The method of claim 95 wherein selectively injecting the substance into the dermis is through at least one hollow needle, by electroporation or by thermal poration.

97. **(Previously presented)** The method of claim 96 wherein selectively injecting the substance into the dermis is through at least one hollow needle having a length and outlet selected for their suitability for delivering the substance into the dermis to obtain systemic absorption of the substance from the dermis.

Claim 98. **(Canceled)**.

99. **(Previously presented)** The method of claim 95 wherein the substance is a low molecular weight heparin.

100. **(Previously presented)** The method of claim 95 wherein the substance is a dopamine receptor agonist.

101. **(Previously presented)** The method of claim 95 wherein the substance is in the form of nanoparticles

102. **(Previously presented)** The method of Claim 97 wherein the at least one hollow needle comprises an array of microneedles.

Claims 103 and 104. **(Canceled)**.

105. **(Previously presented)** The method of claim 95 wherein the substance is administered by repeated bolus injections.

106. **(Currently amended)** A method for administration of a substance to a mammal, **wherein:**

the method **comprises** ~~comprising~~ selectively injecting the substance into the dermis of the mammal by bolus administration, ~~wherein~~

improved systemic absorption of the substance is produced relative to absorption **that would be** produced upon injecting the substance subcutaneously by bolus administration, and ~~wherein~~

the substance is a low molecular weight heparin or a dopamine receptor agonist.

107. **(Previously presented)** The method of claim 106 wherein selectively injecting the substance into the dermis is through at least one hollow needle, by electroporation or by thermal poration.

108. **(Previously presented)** The method of claim 107 wherein the method comprises selectively injecting the substance into the dermis through at least one hollow

needle having a length and outlet selected for their suitability for delivering the substance into the dermis.

Claim 109. **(Canceled)**.

110. **(Previously presented)** The method of claim 106 wherein the substance is a low molecular weight heparin.

111. **(Previously presented)** The method of claim 106 wherein the substance is a dopamine receptor agonist.

112. **(Previously presented)** The method of claim 106 wherein the substance is in the form of nanoparticles.

113. **(Previously presented)** The method of claim 107 wherein the at least one hollow needle comprises an array of microneedles.

Claims 114 and 115. **(Canceled)**.

116. **(Previously presented)** The method of claim 106 wherein the substance is administered by repeated bolus injections.

Claims 117 and 118. **(Canceled)**

119. **(Currently amended)** A method for administering a substance to a mammal, **wherein:**

the method **comprises** ~~comprising~~ selectively delivering the substance to the dermis by bolus administration to achieve improved systemic absorption as compared to systemic absorption **that would be** produced upon bolus subcutaneous administration of the substance at an identical dose, **and wherein**

the substance is a low molecular weight heparin or a dopamine receptor agonist.

Claim 120. **(Canceled)**.

121. **(Previously presented)** The method of claim 119 wherein the substance is a low molecular weight heparin.

122. **(Previously presented)** The method of claim 119 wherein the substance is a dopamine receptor agonist.

123. **(Previously presented)** The method of claim 119 wherein the substance is in the form of nanoparticles.

124. **(Previously presented)** The method of claim 119 wherein the delivering is through a hollow needle, by electroporation, or by thermal poration.

125. **(Previously presented)** The method of claim 124 wherein the delivering is through at least one hollow needle.

126. **(Previously presented)** The method of claim 125 wherein the at least one hollow needle comprises an array of microneedles.

Claim 127. **(Canceled)**.

128. **(Previously presented)** The method of claim 119 wherein the substance is administered by repeated bolus injections.

129. **(Currently amended)** A method for administering a substance to a mammal, **wherein:**

the method comprises ~~comprising~~ selectively delivering the substance to the dermis by bolus administration, ~~wherein~~

improved systemic absorption is produced as compared to systemic absorption that would be produced upon bolus subcutaneous administration of the substance at an identical dose, and ~~wherein~~

the substance is a low molecular weight heparin or a dopamine receptor agonist.

Claim 130. (Canceled).

131. (Previously presented) The method of claim 129 wherein the substance is a low molecular weight heparin.

132. (Previously presented) The method of claim 129 wherein the substance is a dopamine receptor agonist.

133. (Previously presented) The method of claim 129 wherein the substance is in the form of nanoparticles.

134. (Previously presented) The method of claim 129 wherein the delivering is through a hollow needle, by electroporation, or by thermal poration.

135. (Previously presented) The method of claim 129 wherein the delivering is through at least one hollow needle.

136. (Previously presented) The method of claim 135 wherein the at least one hollow needle comprises an array of microneedles.

Claim 137. (Canceled).

138. **(Previously presented)** The method of claim 129 wherein the substance is administered by repeated bolus injections.

139. **(new)** The method of claim 85, wherein the ratio of the C_{\max} produced by the dermis administration to the C_{\max} that would be produced by the subcutaneous administration is at least about 2.2.

140. **(new)** The method of claim 139, wherein the t_{\max} produced by the dermis administration is no greater than about 38% of the t_{\max} that would be produced by the subcutaneous administration.

141. **(new)** The method of claim 85, wherein the t_{\max} produced by the dermis administration is no greater than about 38% of the t_{\max} that would be produced by the subcutaneous administration.

142. **(new)** The method of claim 85, wherein:
the composition comprises a low molecular weight heparin, and
the low molecular weight heparin comprises dalteparin.

143. **(new)** The method of claim 142, wherein the ratio of the C_{\max} produced by the dermis administration to the C_{\max} that would be produced by the subcutaneous administration is at least about 2.2.

144. **(new)** The method of claim 143, wherein the t_{\max} produced by the dermis administration is no greater than about 38% of the t_{\max} that would be produced by the subcutaneous administration.

145. **(new)** The method of claim 142, wherein the t_{\max} produced by the dermis administration is no greater than about 38% of the t_{\max} that would be produced by the subcutaneous administration.